Panama

Notes.

Heidl. Chagres

Plants.

Plant-Lists
23.6

Notes

to a collection of Plants made in the vicinity of Chagres on the Isthmus of Panama, from January, 5th – April, 3d 1850.

by Augustus Fendler.

The sign ` stands for feet, " for inches.

№

1.

January – April. Low level tracts near the sea. small tree 10-30' high; flower: yellowish-white; calyx and corolla very thick, fugacious.

2. Apocyneæ

Febr: – April. Shrub 10–20' high, corolla bright yellow; fruit bright scarlet when ripe; shape leaf: margin of the woods fronting the sea.

3.

Febr:. Shrub 10–12' high; bank of a little stream; flower of a brownish green color.

4.

March. Plant: twining.

5. Scoparia dulcis L.

March – April, Near the sea-shore, petals: 4, white; stam: 4, altern:

6. Vismia sp.n.

February, 9th. Swampy places. Shrub 8–15' high. Sep: 5, green, apex somewhat dotted; Pet: 5, fugacious, twice as long as the Sep:, green, finely dotted, the inner side of the petals densely pubescent; stam: 5, altern:.

7. Vismia mexicana Mt. Lill

March, 3d. – Shrub 25' high; low level ground.

8. Vismia macrophylla H&K

Febr. – Tree 20–30' high. Shady woods. Sepals: outside greenish with brown stripes

9.

Febr: – A small prostrate herb. Wet meadows.

10.

January – April, – Moist and sheltered places. Stem: reclining.

11.

February, 2d. – Moist meadows.

12.

February. – Moist places near the sea.

13.

January – March. – Sea-shore, low level meadow. ~~Flower: yellow~~ A plant of stunted growth; flower: yellow; ~~carpels~~ not armed with bristles; lower surface of the leaves tomentose

14.

February. – Sea-shore. Growth of the plant erect; flower: yellow, nearly ½" in diameter; fruit (carpels) armed with 2 short stout bristles.

№

15.

March. – ~~Fruit: nearly sessile; leaves: not tomentose~~ 6' unlike those in №s 13 & 14, not tomentose, upper side very slightly pubescent.

16.

March. – Local: foot of a hill.

17.

February – April. – Low level meadow. Flower: yellow; upper side of the leaves fringed with ~~+~~ red.

18. Sida cauescens Cas.

Febr. – April. – Flower: yellow; Fruit armed with long bristles.

19.

March. – Shady woods, moist low land; flower pale purple.

20.

April, 6th. – Tree 20–25' high; low level places in shady woods; Flower: golden-yellow.

21.

March. – 3–4' high; low fertile soil.

22.

February. – Shrub 5–8' h.; swampy places; flower: pale-yellow.

23.

February. – 4–6' high; low fertile soil.

24. Byrsonima verbaciifolia Rich

March, 26th. – tree 20–30' h., small hills; flower: yellow, when more advanced turning to ~~+~~ orange color; lower surface of the anthers blackish gray, upper surface white pulverulent.

25.

Febr. – April. – Somewhat hilly region; Flowers: yellow.

26. Davilla rugosa Poir

Jan: & Febr: – Shrub 2–4' h. with long slender somewhat decumbent branches; hilly region.

27. Tetracera volubilis L.

March. – 1–3' high; sheltered by other shrubs in low shady woods. Fruit: 3-angular, of a deep glossy green color.

28. Miconia

March, 15th. – Shrub 8–12' h; shady woods.

29. Miconia

January – April. – Shrub 7–12' h; low land as well as hilly region.

30. Miconia

January – April. – Shrub 12–20' h; low land near the sea shore, along the margin of woods; upper surface of the leaves glossy. Pet: 5, white, obovate; stamens: yellow; anthers: conspicuous, brown

with yellow margin when old; ripe berry: bluish-black.

31.

Febr. 28d.— Shrub 15-20' high; damp shady woods; leaves: glabrous on both sides.

32. Meliosma
March, 4d.— Shrub 10-18' high. damp shady woods; Leav: dotted with translucent dots.

33. Aldenia
January - March.— Shrub 8-18' h; damp shady woods, low land; Petals: 5, white; Stam: red; ripe berry deep blue.

34. Aldenia?
January.— Shrub 10-15' h; moist low-land in the vicinity of the sea-shore.

35. Aldenia?
Jan:— March.— Shrub 10-18' h; damp shady woods; Calyx: 5 toothed, fleshy cylindrical; Pet: 5, white, retroflexed; Stam: projecting; Style: stout, projecting persistent.

36.

February.— Shrub 10-15' h; damp shady woods; a plant similar to №35. but the base of the leaf is not attenuated

37.

March, 4d.— Shrub 8-15' high; damp shady woods; Pet: white; In some specimens of a more luxuriant growth the base of the leaf is attenuated into petiole form, while in others the leaves are sessile or nearly so.

38.

March, 10d.— Shrub 6' high; banks of a little stream; Fruit: when ripe of a scarlet color; inflorescence: in the axils especially of the older part of the branches & stems from where the leaves have fallen off.

39.

March, 15d.— Shrub 8' high; margin of a small stream.

40

February.— Shrub 8-12' h; low wet ground; branches filled with pith; Flower: red, slender tubular, 1-1¼" inch long; berries: scarlet, numerous.

41.

March, 1st.— shrub plant: 2' high; shady bank of a rivulet.

42.

March 3d.— 1-1½' high; low humid places near a rivulet; Berries of a fine scarlet color.

43. Serjania
February 14d.— Plant: climbing over shrubs at the foot of hills; Leaflets: sparingly toothed, teeth more or less rounded.

44. Serjania
March, 20d.— Climbing over shrubs, similar to №43. Leaflets: entire; Flower: minute, white; Seeds: not so conspicuous as in №43; Climbing-Spirals: stouter.

45. Serjania
February, 26d.— Plant: climbing and overlapping shrubs; Fruit: wings surrounding the apex of the fruit also the part of the fruit that encloses the seeds armed with fine but stiff bristles, which like those of some Opuntia species enter into and adhere to the fingers that touch them.

46.

February 15d.— Pl: recumbent on shrubs and trees; Creek-bank; Fruit: 3 Samaries together.

47. Thyrsacanthus?
February 18d.— Plant: somewhat twining or resting on low shrubs; Flower: yellow; Fruit when young in three samaries together, when older (by suppression of 1) in pairs.

48. Heteropteris?
February 12d.— In low moist places; flowers: yellow, rather showy, 1½ inches in diameter; Pet: finely pectinate.

49. Bracteopteryx boreali A. Juss
January - March.— Wet level places & marshes; Plant: somewhat climbing; Petals: 4, yellow, with claws; Fruit: beaked, in pairs as well as solitary.

50. Dolichocarpus
February 28d.— Plant: twining; bank of a little river.

51. Inga sp. n.
January 24d.— Tree 20-30' high; River-bank; Calyx ¼ inch long, 5 toothed; Corolla ¾ inch long, 5-toothed; silky pubescent; upper surface of the leaves glossy.

52.

February 14d.— Plant climbing by tendrils; hills.

53. Hippocratea elliptica H&K?
Febr. & March.— Plant: twining; near a little river; Sep: minute; Pet: green, with 1 or 2 minute vessels at the inner side of the upper half of the petal.

54. Melastoma?
March, 8d.— Shrub 15-20' high; damp shady places in the woods; Leaves: glossy; Sep: 6, white, minute; Pet: none.

55. Polygala paniculata L.
February, 3d.— Low level meadow.

56.

January, 27d.— Hilly region; fruit: brown; Seeds: black, smooth & glossy when ripe; leaflets: 5.

57.

January, 26d.— Hilly region, margin of woods; leaflets: 5, glabrous, deep-red; Seeds when ripe: black, smooth & glossy.

58.

March, 15d.— Plant 2 feet high; margin of a small rivulet; Berry: scarlet when ripe.

59. Leiothrix
February, 25d.— 3-5' high; Alluvial of a creek; Flower: white.

60. Leiothrix
March, 15d.— Damp shady woods; Shrub 15-20' high.

61.

March, 3d.— Plant 1-1½' h; damp shady woods; Sep: 5, greenish-yellow; anthers: white.

62. Leiothrix
February 2d.— Shrub 5-10' h; damp shady woods; Corolla: white, 5-cleft, easily falling off.

63.

March, 20d.— Shrub 8-15' high; Alluvial of a creek; Corolla: yellow, 5-lobed; lobes blue.

64. Leiothrix?
February:— Shrub 15-20' high; damp shady woods; lower surface of the leaves grayish; Flower: yellow.

65. Paliconrea
January - March.— Tree 20-25' h; Alluvial of a creek; Calyx-tube: minutely toothed; flower: yellow.

66 Rhynchosia phaseoloides DC.
March.— Plant: twining; hilly region, seeds: smooth, black, glossy with scarlet eye.

67

March, 20d.— The sweet pulp which surrounds the seeds is eaten by the Natives, I did not see the tree.

68.

January, 22d.— Low level ground, margin of woods; Plant sheltered by shrubs, twining or prostrate where not supported by shrubs; Leaflets: 3; Pod: 1-2" long blackish, smooth; Fl: large, yellow.

69.

March.— Plant: twining, in the midst of small bushes; Flower: white.

70. Centrosema Salzmanni Benth.
March 1st.— Alluvial of a creek; Plant: twining; Fl: purple.

71. Phaseolus trinervulatus H&K. var glabratus
Febr. 2d.— Alluvial-land; Plant: twining; Vexillum: pale-yellowish, wings: purple, keel yellowish.

72. Rhynchosia
January, 18d.— Alluvial-land; Plant: twining; Pod: 2 seed.

73.

February, 2d.— Alluvial-land; Pl: twining.

74.

March, 2d.— Bank of a little river (Creek); Plant: twining; flower: blue, in dense racemes.

75. Pachyrrhizus angulatus Rich
March, 5th.— Hilly region; Pl: twining; Pods when dry, will open on a sudden and jerk the seeds from 10-15 feet high.

76.

January, 21st.— Hilly region; growth of the plant erect.

77.

January, 16th.— Low wet meadow.

78. Desmodium off. Desvaux red Dr Linden
Febr. & March.— Hilly region; Plant 2-3' high, growth erect; Flower when young: of violet color, when older: green.

79. Hoodlebium brachycarpum vor brachystachyum
January & Febr.— Margin of the woods on low level ground; Flower: small, bright blue.

80. Canavalia obtusifolia DC.
January - March.— Plant trailing along low moist soil of the sea-shore; flower: purple.

81. Erythrina glauca Willd (Duchassaingia Walp)
January, 20d. Febr. 15d.— Low swampy ground; Tree 20-25' high; flower: orange-color; keel: extraordinary large; Stamens: projecting.

82.

January, 20d.— Foot of hills; tree 20-25' high; Petals: yellow; branches armed with short spines.

83. Deoclea sp. n.
February, 10d.— Bank of a Creek (rivulet); Plant: twining up trees; Flower: easily falling off; of a bluish-purple color; wings of a paler shade than the rest of the flower; Calyx: brownish, punctate.

84. Desmodium triflorum DC.
February, 18d.— In patches on sandy soil near the sea-shore; Plant: somewhat creeping.

85. Cassia occidentalis L.
January, 18d.— Moist places at the foot of hills, a spreading, little shrub 2-3 feet high; Leaflets: 4-5 pair; thin, limber; Pods: 3-4" long, nearly straight, flat.

86. Cassia viminea L. var?
March, 2d.— Hilly region; Shrub 5-10' high; Leaflets: 8 pair; Petals: yellow with red ribs; Anthers: yellow.

87. Pithecolobium (Zaclanthus) sp. n.?
January, 11th.— Foot of hills; Leaflets: 2 pair, (some 1½" l; 1" wide); Petals: bright yellow; Pods: 12" long, straight, sometimes falcate, somewhat torrate; Shrub 10-15' high.

88.

January, 27th.— Hilly region; Pods: 10-12" long, somewhat falcate & torrate.

89.

February, 15th.— Damp shady woods; Plant of a depressed growth 15-20' h; Pods: transversely veined.

90. Cassia pubescens H&K?
February, 3d.— Damp shady woods, low situations; Plant of a depressed crooked growth, 15-20 feet high; Pods: netted-veined.

91. Mimosa Velloziana Mart.
February, 19th.— Margin of woods; shrub 1-3' high with slender beset-down branches; Leaflets: inequilateral; inclined towards each other in each pair; margin of the Pod armed with spines; Leaves: two-branched, each branchlet containing two pair of leaflets, of which the lower inner one is very minute.

92. Cassia obtusifolia L.
March, 2½'. — Foot of hills near low wet places; Shrub 1-2° high; Pods falcate, 6-8" long.

93. Guettarda — Gu. nova Mariloe affi.
March, 2½'. — Bank of a Creek; Tree about 30' high; Sep: at side red; Petals greenish-yellow; Leav: punctate with pellucid ~~dots~~ dots.

94.
April, 1st. — Margin of woods near the Sea-shore; Tree about 40' high; teed & wings of the flower: of a fine brownish-purple color.

95. Cassia tetraphylla Willd
January, 12½'. — Foot of hills; shrub 8-15 feet high; Pet: yellow with red veins; Pods flat, straight, 4-5" long; flower & flower buds easily falling off in drying; very much crowded.

96. Mimosa pudica L.
January, 17½'. — Low moist meadow; plant 1-1½° high; branches 2-3' long, slender mostly prostrate; growth in large patches. Leaflets very sensitive to the touch; Pods in dense clusters, margin hairy.

97.
January, 17½'. — Foot of hills; Plant 2-3' Leaflets very sensitive; Seeds: 8 in number.

98. Mimosa asperata Willd
January - March. — Margin of woods near a swamp; Plant: 5-8' high; flower: white; Leaflets very sensitive; Pods 3-3½" long, flat, covered with very stiff brown hair: somewhat adnate.

99. Aeschynomene ciliata Vog.
Jan: & Febr. — Swampy places; Plant 5-8' much branching; branches spreading, eaten by domestic animals; flower: keel & wings yellow, vexillum: outside deep yellow with red veins; Stem & branches very viscid. Pods: somewhat falcate, consisting of 8 parts.

100.
January, 10½'. — Margin of woods near swampy places; Plant 4-6' high, very sensitive, simil: to No 99, but stem, branches & pods glabrous; margin of the pods sparingly hirsute. Flower: yellow.

101.
January, 26½'. — Foot of hills; Plant 2' high, lower surface of the leaves silky pubescent.

102.
January & Febr: — Hilly region as well as low moist meadows; Plant 1½-2' high; flower: white.

103. March. — Hilly region; tree 25' high.

104. February, 20½'. — Foot of hills; Shrub 15' h.

105. Mimosa
February, 4½'. — Hilly region; Shrub 5' high.

106. Cadia y.u.
March, 5-12½'. — Margin of woods; shrub 10-15 high; flower: white.

107. Dalbergia volubilis Roxb.
March, 20½'. — Moist shady woods; Tree 20-25 h.

108. Gouania corylifolia Roxb.
February: — Alluvium of a Creek; 6-10' high; flower: minute

109. Microtea debilis Sw.
Febr: — Foot of a steep rocky hill, in moist shady places.

110. Pataben
March, 24½'; — Alluvium of a Creek; shrub 1½-4' high; corolla white; fruit a red berry.

111. March. — Margin of a creek; flower deep purple.

112.
Febr. — Between rocks, margin of a Creek; stamens projecting ½" above the persistent calyx, stem sparingly hirsute.

113. Vitex quinata Lam.
January & February. — Foot of rocky steep declivities, on margin of water; herb 3-18'; flower purple.

114.
January & Febr: — Margin of swamps; 3-6' high; flower yellow; Petal: ½" long

115. Fuirena umbellata?
February, 9½'. — swampy places; Pet: yellow, obovate, mostly 6, smaller than in the preceeding N°; fruit: obtuse, 3-outer, 3-inner, clavate when ripe; calyx-lobes: 5-7.

116.
January. — Low moist meadow; Plant 2' high; leaves linear, 1-2½" long, sessile; plant not branched.

117. Passiflora foetida Cav.
January (flowering only in this month) — Plant trailing on the wet sandy beach, a few rods from the margin of the water; flower open only in the morning, lilac color.

118. Tacsonia sanguinea DC
March. — Shady places amongst shrubs; Plant climbing by tendrils; flower: open at different times of the day, of a burning red; Petals 2-2½" long; Stem woody.

119.
March. — Shady humid places in the woods; Plant climbing by tendrils; stem: 4 angular, somewhat winged; Flower: pendant, lilac color; Stamens 5, greenish with brown dots; anthers: white; style purple-spotted; stygma: white. Sepals 5, outside green, inside purple; Petals 5, altern: inside purple, outside of a paler hue; filaments: long slender, bluish purple with white rings, base white to the height of about ¾", apex whitish.

120.
March. — Margin of a Creek; Plant climbing by Tendrils; flower: simil: to N° 119. but smaller; Pet: bluish-purple.

121. Passiflora y.u. affi P. foetida
March. — Wet swampy places; Plant climbing by tendrils; outside of the Sepals greenish.

122. Passiflora (Astrophea) y.u.
March, — Swampy places; Plant climbing by tendrils.

123. Melothria?
March, 17½'. — Low ground, margin of damp shady woods; flower: yellow; plant: climbing by tendrils.

124.
March. — damp shady woods; Plant: climbing.

125.
March. — Ravines; Plant: climbing by tendrils; flower of a burning red.

126. Angiosperma Makoyana Lemaire?
February. — Foot of hills, in shady woods; Plant: climbing; Calyx teeth: red, long slender.

127. Rourea Albizzioides Hook et Arn.
March, 24½'. — Damp shady woods. Shrub somewhat twining or leaning; Petals: white, easily ~~fallen~~ fading.

128. Connarus y.u.
January 7th in flower, March in fruit; — Margin of woods ~~on~~ near the sea-shore, Petals: yellow.

129.
Febr: — hilly region; 2-3' h; anthers conspicuous, bright yellow; &

130. Cordia perviliana ? micrantha DC?
Jan: — March; low level ground near the sea shore; ♯ 15-20' h; fl: expanding first at the apex.

131.
Febr: damp shady woods, ~~low~~ 8' high. leav: 3-12" l:, margin beset with little warts.

132. Hydrocotyle ~~vulgaris~~ asiatica ? Hedera arborea in my set
Jan: ~~Feb~~ low wet places in the vicinity of the sea-shore.

133. Eryngium foetidum L.
Jan: — March; low ~~wet~~ moist meadow near the Sea-shore; — 6-14" h.

134. Viscum?
Jan: 8th; upon trees growing in low land; branches quadrangular; berries round, of a champaign color.

135. ~~Jan~~ Febr:; ~~on~~ upon different species of trees, damp shady woods near the swamps; fr: in little spikelets.

136.
January; ~~bor~~ borders of ~~the~~ a swamp; a small tree or shrub 12-20' h, 3" in diameter.

137.
a flower of which I have not seen the tree; February; var: ovata

138. Chiococca racemosa Jacq. fronting the seashore
January; margin of ~~the~~ woods; pl: somewhat twining; berries round white when ripe.

139. Randia obovata Hook
Jan — March; margin of woods fronting the Sea-shore; shrub ~~10~~ 6-20' high, each pair of the opposite branches at right angles to those preceding them: ~~&~~ stout stiff Spines; flowers: white in the axils of leaves & branches, ~~on~~ sessile; berries ~~are~~ white when ripe.

140. ~~Feb~~ March; margin of the river; tree 20-40' high.

141. Sambucus? Spondias affi S. lutea
March 20½'; ~~bar~~ margin of a small river, ~~15~~ 20-~~30~~' high; fl: white.

142. Febr: 2d; in and near the swamps, 1-3' h; fl: white; apex of the pistils? purple.

143.
Jan: — March; damp shady woods margin of swamps & low level meadow; 1-5' h; upper surface of the leaves glabrous, lower one silvery tomentose.

144. Borreria ~~spinosa~~ Ch. Schl.
Jan: — March; margin of woods & moist level meadow; pl: 1-2' h;

145. Spermacoce tenuior L.
January 12½'. margin of swamps; pl: 1-2' h:; pet: ♯ 4, white) plumate on the inner side.

146. Diodia scandens Sw.
Jan: & Febr: margin of swamps 2-~~4~~ 4½' amongst shrubs, ~~&~~ branches several ~~feet~~ long prostrate, others erect 2-3' h.

147.
Jan: 20½', low level meadow; 1-2' high. stem quadrangular.

148. Morinda
Febr: 10½', ~~damp~~ damp shady woods low ground; tree 20-30' high; pet: 5, white, lobes over ½" l, recurved; stam: 5, altern; not much higher than the corolla throath; pist: projecting with (2 stigmas nearly ¾" long.)

149. Spermacoce verticillata Vahl
Jan: — March; in low swampy places; 1-3' h; stem: quadrangular; branchlets 4 winged; pet: 4, white.

Compositae.

150.
Febr: 8½'; pl: margin of damp shady woods; pl: 5-~~10~~ 18' h; flowerets: white, with ¼" 2 ~~white~~ curved pistils projecting above; flowerets ¼ far above the chaff —

151.
Febr:; hilly region; pl: twining;

152.
Febr: 20½'; ~~hilly region and~~ margin of damp shady woods. stam: brownish yellow projecting above the chaff. pl: 5-8' h.

153.
Febr 25½' hilly region; 5-~~10~~ 18' h:; leaves, paricles & pedunculs: very thin & limber.

154. February, 20½'; hilly region; 5-8' h.;

155.
Febr: ~~28~~ 8½'; ~~hilly region~~ low swampy region; 5-~~10~~ 18' h; upper leaves 4-5" long, narrow, lower ones 2-3 ~~lobed~~ cleft, the central ~~division~~ lobe ~~is~~ vastly predominant in size; fl: ~~Yellow~~ greenish yellow ~~glossy~~ lustre.

156.
Febr: 20½'; low swampy region; 5-8' h; chaff: dense, ~~bording~~ very fine Dolense, binding the flowerets.

157.
Febr: 2d; hilly region; 4-6';

158.
Febr; ~~hilly~~ foot of hills; 1-3' h. branches: long slender; leaves: deep ~~green~~ bluish green.

159.
Febr:; pl: twining; hilly region.

160.
Febr: 1st; margin of damp shady woods. 5-8' h,

161.
1st March 10½'; margin of damp shady ~~wo~~ woods; 4-6' h;

162. ~~Febr:~~ & March; fort of hills; 6-15" h.

163. ~~Febr:~~ March; margin of woods in low moist places; 1-3' h;

164. Jan:, 9c. low bottom-land; pl: 2-3' h;

165. March; creek-bottom; about 1' h.

166. Febr:; low places near the sea-shore; 6"-2' h.

167. March, 2d.; low moist land; pl: 10-15' h. pet: bright yellow.

168. Jan & Febr:; pl: creeping on low places along the beach; flowers yellow, rays bright yellow.

169. Eclipta
Febr:; low swampy places; herb prostrate

170. January; hilly region; petals yellow.

171. ~~Febr~~ January-Febr:; ~~hilly region~~ margin of damp shady woods & open ~~pl~~ level ~~open~~ places. fr: 4 parted.

172. March, 1½, damp shady woods in the neighbourhood of a little riv:, 3-5' h.

173. March; hilly region; 1½-2½' h;

174. January; high bank of a small river. 5-~~15~~' h; fl: fine red.

175. Jan:-March; low moist meadow; 1-2' h; fl.-heads containing 4 white flowerets;

176. February 4c.; creek-bottom; 2-3' h;

177. Cephaelis tomentosa Wills
Jan: & Febr:; hilly region; ~~drop fruit~~ red. pl: 2-8' h; ~~fl:~~ involucre, deep fiery-or scarlet red; flowerets: yellow.

178. January; pl: growing upon the lower part of the trunk of ~~Cocoa~~ and other trees, ~~even at~~ so as to ~~the~~ leaves hidden; fr: a berry of a blue color when ripe.

179. Coccocypselum aff. C. repens
January-~~Mch~~ & Febr:; swampy places creeping near the base of trees, and upon roots ~~of~~ (Epiphytes) berries: fine deep blue color, glossy

180. Jan-~~Febr~~ & March; in ~~low~~ ~~&~~ swampy places, ~~farinacy~~ amongst shrubs, twining; petals: 5, white; berries, in ~~thick~~ clusters in the axils of the leaves, blue when ripe.
Sabicea sp.n.
181. March; hilly region; erect or nearly so; 6-10' h; fl: white.

182. Exegenia
March; margin of damp, shady woods; shrub 6-~~8~~-8' h; fl: white, ~~odoriferous~~;

183. Febr:, 27c.; damp shady woods; fl: pure white, odoriferous

184. Tuberaemontana?
~~tuberaemontana~~ ~~Jany~~ March; low swampy places; 10-30' ~~Calyx~~ ~~pubescent~~ ~~4 lobed~~ ~~reflexed~~; ends of ~~the~~ ~~fruit~~ ~~pod~~ pure white. From the (nearly) ~~end~~ branches there exudes from the centre & around the ~~cut~~ (inside of the bark) a very streaky white substance which ~~turns~~ hardens on the atmosphere & can be drawn out into threads.
Casearea (Oncarea)
185. ~~Febr:~~ ~~8~~ ~~March~~ ~~2c~~; margin of damp shady woods; 3-8' h; ~~fl: white~~. sepals: 4, ~~white~~ ~~pink~~ reflexed, outside greenish white, inside white; pet: none; stamens: 10 ascending; ~~fr~~ ~~the~~ another set of Stam: ~~fourth~~ plumose, 10 alternate with the first; style: 3 parted.
Casearea (Oncarea) C. sylvestris aff.
186. January, 20c.; shady wood; a slender shrub 5-8' h;

187. Guettarda
Febr: 12c.; deep shady woods; tree 25-~~40~~-35' high; leaves to be found only at the apex of the branches and ~~so~~ rather crowded together; fl: white, ~~raised~~ ~~of~~ situated ~~all~~ around the stem & branches.
~~so~~

188. Febr, 8c.; ~~Creek-bs~~ bank of a small river, 6-10' h; calyx green, 4 toothed, partly opened; stam: projecting but very little; pet: none.

189. ~~Febr~~ January 15c.; low bank near the mouth of a ~~sm~~ creek; shrub 3-5' h. with long, slender straight branches, densely beset with leaves; 1-2 ~~small~~ berries in the axils of the leaves.

190. Febr:; damp shady woods; shrub 15-20' fl: greenish yellow.

191. Cinchonea elliptica Poir
March, 11c.; low land shady woods; shrub 3' h; sepals: 4-5, green, thick; ~~the~~ open ~~at~~ in flowering only in ~~season~~ shrinks, ~~barely~~ wide enough to let the Style & some of the stam: protrude.

192. Casearea (Trouessana)
March; margin of damp woods ~~in~~ the more exposed localities; shrub 3-~~6~~' h; ~~sepals~~ 5, ~~white~~ displaced; pet: none; stam: parallel with the axis of the fl.
Erythroxylon

193. Febr: 26c.; damp shady woods, in low ~~si~~ places; shrub 5-8' h, ~~with~~ slender branches; ~~fl: greenish white~~; fr: ~~so~~ of a scarlet color, oval & smooth; seeds surrounded with a pulp which when dried up, makes the fr: ~~appear~~ ~~furrowed~~ and ~~the~~ appear quite different.
April 1st sep: green; pet: white

194. Elaeocarpus sp.n.
Febr: 20c.; margin of ~~the~~ damp woods; tree 15-20' h, spreading very much; sep: green; pet: none, Stam: indefinite, yellow; giving the whole fl: a yellow appearance.

195. Cedrela
March, 5c.; margin of damp woods, ~~near~~ swamps; shrub 8-12' high; fl: white

196. Monimiaceae
March, 1c, ~~pl~~ ~~with~~ ~~the~~ ~~steep~~ & wet banks of an ~~creek~~ over shadowed creek; 5-15' h. ~~forest~~ growth; fruit: green.

197. Solanum
Febr: in fr:; March in fl:; shady woods ~~upon~~ margin of ~~the~~ ~~swamps~~ ~~region~~; pl: ~~trees~~ & ~~stumps~~ ~~for support~~ ~~climbing~~; fl: ~~greenish white~~ ~~pale~~ ~~blue~~, ~~calyx~~ ~~green~~ ~~very~~ pleasing, consisting of 2-parted or 2-divided ~~one~~ sepals ~~of~~ ~~blue~~ ~~petals~~ ~~corolla~~ ~~green~~ ~~yellow~~, 5 lobed ~~forms a~~ ~~tube~~ ~~contracted~~ ~~by~~ a ~~thin~~ ~~film~~ starshaped body: Corolla: greenish yellow, 5 lobed tubes contracted by a thin film.

198. March; ~~both~~ low places ~~at the~~ bank of a small river.

199. Febr:; low swampy places; ~~herb~~ & low herb.

200. Olacineae Tweedia? Nees?
Febr: & March; low moist bottom-land; 2-2½' high;

201. January; low woods; ~~shrub to 20' h~~ leaves in whorls 4; fl: ~~to~~ yellow, ~~large~~ on short pedicles; throath of the corolla 1½" long, narrow; corolla ¼-2" wide at the apex, 2" long.

202. Febr:; low wet bank of a small riv:; pl: 2-4' h; stem: quadrangular, thickened at the nodes

203. March 16c.; fallen off flowers from a tree 80-100' high, inaccessible ~~to me~~, with the leaves & flowers high in the top, inaccessible to me; the ~~the~~ greyish blue flowers were in such dense masses as to ~~give~~ make the tree a very conspicuous amongst all the rest, by its blue hue; hilly region.

204. March 3d, low moist land ~~swamp~~ not far from a small river; 2-5' h; fl: red, transparent.

205. March, 10c. ~~f~~ low moist region; fl: white with purple.

206. March, 26c.; margin of a swamp, damp shady place; pl: climbing; ~~by~~ fl: white.
Macfadyena

207. Jan-March; margin of the river, swamp places; pl: climbing by a 3-digitate curved & ~~rather stiff~~ from appendage, terminating in sharp claws ~~taken~~ able to take a firm hold.

208. March 13c.; damp shady woods, ~~swamp~~ low region. 8-10' h; fl: deep scarlet.
Aphelandra Seidlairiana Nees
209. Febr:; ~~low wet~~ bank of a ~~small~~ little river; shrub 8-12' h. corolla ~~red~~ 2 ~~lipped~~ ~~red~~; fl scales of the flower ~~many~~ red; stamens 4, ~~unequal~~ ~~in length~~ unequal, long & slender.

210. Febr: 10c.; margin of damp woods; shrub 10-14' h., leaves: stout &; flower: orange color.

211 Herpestes ~~Reptiflora~~ Benth
Jan-Febr:; swampy places; pl: 2-3' h; stem: quadrangular.

212. March, 2c.; low moist meadow; low prostrate herb; fl: & fr: partly hid ~~by~~ between 2 smaller leaves; fl: blue.

213. Herpestes chamaedryoides var latifolia
March; ~~Lagoon~~ ~~part of a swamp~~ near the sea-shore; low somewhat creeping herb, leaves glabrous; fl: yellow; fr: hid between 3 leaflets.

214. January, 8c.; low meadow;

215. Stemodia parviflora Ait
Jan: 8c.; low flat ground near the sea-shore; ~~stem~~ 3-6" h; stem & young leaves ~~a~~ white hairy; corolla: white.

216. Stemodia sp.n?
Febr:; ~~Loc~~ locality the same with 215.

217. Herpestes Monniera HBK
March, 3c.; low moist places near the sea-shore; corolla 5 lobed, light ~~purple~~ blush color; throath of the corolla tube brown, stam: 4, 2 long. ~~4~~ 2 short-ones; anthers & stigma: greenish blue.

218. Febr: 1½; low ~~sw~~ meadow.

219. Stachytarpheta jamaicensis Vahl
Jan: 25c.; ~~shore~~ sea-shore; a prostrate plant with quadrangular stem; spike 16-24" l: fl: blue
Lippia geminata H.B.K.
220. January; low moist meadow; shrub 4-~~8~~5' h; fl: yellowish white;

221. Hyptis verticillata Jacq. near the sea shore
January, ~~8~~ & March low meadow; ~~pl~~ 2-3' h, ~~near the~~ fl: in small clusters around the nodes of stem & branches; calyx ovoid, glabrous, minute; fl: minute.

222. Febr:; foot of hills; ~~3~~-~~4~~ 2-3' h.

223. Febr:; between rocks of the opposed parts of a creek-bed, margin of the water; 1-2' h; fl: purplish,

224. January; foot of hills near rivulets; 1-2' h; fl: light blueish purple.

225. Bleekeria?
January-March, low meadow, ~~&~~ & margin of ~~the~~ clump shady woods. 6'-18" h; stem bent at the nodes into an angle.

226. Hyptis spicata Poit. β. ventricata
Febr.-March; hilly region near water courses, ~~bank~~ 5-10' h; fr: ascending.

227. March, hilly region; ~~branch~~ ~~at~~ 1'-2½' h, stem & branches quadrangular.

228. *Rhytidoglossa R. secunda* Hook f.
March; foot of hills; 2-3' h; branches of a deep green, ~~color~~, contracted a little above the nods ~~&~~; corolla 1½" l: ~~red~~ dusky purple; style filiform (~~triangular~~) 2" l, persistent ~~to the~~, calyx ½" l.

229. Feby foot of hills; stem ~~white~~ 1½-2½' h; stem quadrangular; fl: in little heads

230. *Leptomeria micranthera* Hook
March; margin of woods, low ground; pl: 12-18" h; stem quadrangular; fl: minute, bluish white.

231. *Hypsis capitata* Juss
January & Febr:, margin of ~~swamps~~ damp ~~low~~ woods; ~~to~~ pl: 3-6' h; fl: minute, white, irregular ~~or~~ ⁵⁄₈"; stem: quadrangular.

232. *Tournefortia cabegaba* Lam herbaceous shrub
March; margin of ~~swamps~~ woods; 5-10' h; corolla white, margin lapped together in 5 parts,

233. *Heliotropicum* ?
Jan-March; level moist meadow near the sea-shore; 1-2' h; fl: blue.

234 *Tabernaemontana grandiflora* L.
Jan ~~Feby~~:-March; margin of woods fronting the sea-shore; shrub 5-15' h; fl: yellow twisted in astivation, 2" in diam; fruit: ~~two~~ in pairs, broadly falcate, apex pointed downwards, from the wounded parts of ~~the~~ branches a white viscid juice exudes.

235. March, 15°; margin of woods fronting the sea-shore; fl: somewhat tawny & pendant; fl: yellow; seems to be the same with 200 but the stem branches & the nibs of the leaves are not hairy like 201.

236. *Hydrolea spinosa* L.
Jan:-March; margin of open low (swampy places, ~~and~~ mostly ~~at~~ the foot of ~~the~~ hills; shrub 2-5' h; fl: bright blue on short pedunoles in the axils of the leaves.

Convolvulaceæ

237. *Aniseia*
January-March; ~~low~~ swampy ~~or~~ low wet places; pl: twining; fl: white, 1" wide, ~~to~~ apex of the lobes running out into a bristle.

238. *Manettia cuspidata* Bert.
Febr:; shady woods on low ground; pl: twining; corolla deep red, narrow 4 lobed, calyx ~~tube~~: green, 4 ~~cut~~ lobed, lobes 2 divided.

239. *Ipomoea pes caprae* L.
January 8-29°; Creeping in different directions over the loose & wet sand of the low beach; branches very tenacious and used ~~for tieing bundels together~~ or sometimes as a substitute for rope by the natives; fl: bright copper color (3½" diam); leaves ~~thick~~ somewhat fleshy.

240. *Batatas acetosaefolia* Choisi
Jan:-Febr:; creeping over grassy places ~~and~~ of the beach; fl: white 1¼" in diam.

241. *Ipomoea umbellata* Roth
low ground in & near banks of water courses
Jan-March; shady woods; ~~in low~~ pl: Twining; pl: yellow, showy.

242. Febr: ~~Low boat~~ swampy places, shady woods; twining; fl: purple; calyx consisting of (~~membranaceous~~ leafy) scales.

243. Febr, shady woods; pl: twining; ~~leaflike~~ purple; calyx; consisting of soft scales the apex running out into an awn, involucre below the calyx.

244. March; margin of shady woods; pl: twining; fl: deep purple; calyx ~~of the fl:~~ consisting of leaflike sepals.

245. January, 8° ~~from high shrubs~~ low swampy places; twining; did not see either flower nor leaves. ~ and overtopping

246. January; margin of woods, low level ~~ground~~; pl: 5-15' h; leaves upper surface ~~glabrous~~, lustre, lower surf: yellowish white densely tomentose.

247. January, low open places ~~not~~ fronting the sea-shore. pl 1-2' high; leaves thin, ~~glabrous~~ entire or ~~sinuate~~; 5-6 toothed, fl: ⅓" long, yellow;

248. *Thyella*
January 8°; low sandy place near the sea-shore; pl: 1-8 2½' high; stem & branches densely pubescent; corolla yellow with black spots.

249. January; hilly region; pl: 1-2½' h, fl: yellow.

250. *Poranadictyon* ?
Jan: & March; low ~~wet~~ marshy places, margin of ~~the~~ rivers and ~~damp~~ shady woods. pl: twining; fl: ~~in clusters~~ lobes of the corolla; ~~fl:~~ yellow with a ~~red~~ bright sulphur colored ring around the apex of the tubular throath, ~ standing at right angles with the ~~cal~~ corolla ~~tube~~ throath. ~ fr: consisting of 2 falcate podlike long slender ~~fruit~~, with their apexes grown together;

251. *Solanum*
March, 25°; creeks ~~hilly~~ valleys ~~to~~ in ~~the~~ hilly region; shrub; 10-20' h; fl: light yellow, minute.

252. *Solanum*
March, 20°; hilly region; ~~pl:~~ shrub (climber) 5-10' h; pet: 5, white.

253. *Solanum*
Jan-March; margin of damp woods low ground; pl: 3-6' h, long slender branches ~~sometimes~~ ~~&~~ somewhat climbing or reclining; inflorescens: between the internodes, branches stem & midribs of the leaves armed with stout recurved spines; upper surface of the leaves rough (warty) lower surface: whitish; leaves 6-7 cornered also entire. fl: blue.

254. *Solanum*
Febr: & March; margin of damp woods & open places between them; shrub 8-~~12~~ 15' h; ~~fl: white~~ corolla: ~~&~~ bluish white leaves: tomentose on both surfaces; inflorescens between the internodes.

255 *Marsdenia M. scandens* Roxb.
March ~~& April~~; shady woods; climbing by long slender ~~tendrils~~ twining to 1-3" ~~&~~ shrubs & often trees; ~~fl:~~ corolla: light ~~flesh~~ ~~color~~; plaited in astivation; ~~the~~ ~~outside~~ ~~lap~~ of the corolla which is outside in astivation; velvet pubescent;

256. March, foot of rocky hills; fl: purple.

257. January-March; near or in the water along ~~rivers~~ low banks of the river; pl: twining; fl: white, funnel shaped; 2" l, 1" wide ~~at the top~~ when expanded;

258. Jan:-March, low wet places near the sea-shore; 2-3' h. fl: ~~white~~ ~~red~~ yellowish red; pl: very difficult to dry.

259. January; ~~foot of~~ ~~a~~ between rocks, dry ~~hilly~~ ~~pl:~~ region; a small herb with ~~deep~~ green leaves.

260. January; hilly region ~ herb 2-4' h, growth erect.

261. January; moist meadow; 8-16' h;

262. January; margin of the woods, in grassy places; low herb.

263. January, 7°; low wet places near the sea-shore.

264. *Potamophe peltata* Miq
March; ~~in~~ shady ~~places~~ low shady woods; ~~somewhat~~ twining ~~&~~

265. March; ~~on~~ ~~a tree~~ the base of half rotten trees, in damp shady places.

266. *Asclepias*
March; margin of low woods, shady places; pl: 2-6' h; leaves ~~thick~~ ~~&~~; stem: deep bluish green.

267. March; damp shady woods; 2-4' h; simil: to 266, but differing in the fruit. ~

268. *Asclepias*
March; margin of woods; 3-6' h,

269. *Asclepias*
March; shady, low woods; pl: 8-15' h; ~~pl:~~ similar to 268, but leaves cordate at the base; upper surface of the leaves ~~rough~~ & hard ~~surf~~ to the touch; if passed over from the apex towards the base.

270. *Asclepias*
January-March; margin of low shady woods fronting the sea-shore; upper surface of the leaves glabrous & of great lustre. pl: 4-7' h.

271. March; foot of hills; 6-10" h; leaves dotted with brown dots.

272. March; margin of wood, fronting the sea shore; pl: decumbent; fl: white.

273. Febr: 25°; meadow; margin of woods; ~~marsh~~ 8-14" h; fl: minute green.

274. *Euphorbia peplidifera*
January-March; low places in near the sea shore; decumbent.

275. *Euphorbia hypericifolia*
Febr: 27°; margin of woods fronting the sea-shore; pl: ~~erect~~ of erect growth; fl: minute, white.

276. *Euphorbia (Chamaesyce)*
Febr:; margin of woods, fronting the sea shore; pl: adnate to the ground. margin of the leaves ~~mostly~~ red.

277. *Euphorbia hypericifolia*
March; margin of woods, fronting the sea-shore; pl: decumbent; seeds 4 ~~corbeled~~ angled with little cavities.

278. *Euphorbia (Chamaesyce)*
March; ~~local~~ ~~mar~~ with the preceding Nº; pl: adnate to the ground.

279. *Dalechampia heterophylla* Roxb
Febr: & March; damp shady woods; ~~and~~ banks of ~~creeks~~ little rivers; pl: twining.

280. *Myriocarpa* ~~hispidula~~ Benth
~~March, & Feby~~ hilly region: steep bank of a small river; shrub 10-18' h;

281. *Acalypha leptostachya* Wall?
March, 18°; ~~low~~ ~~woods~~ ~~extend~~ ~~woods~~ margin of openings in ~~damp~~ somewhat marshy ~~low~~ woods, ~~low ground~~; shrubs 10-20' h, Catkins: greenish yellow.

282. *Carex* Linn
~~Mar~~ Febr: 29°; shady; somewhat marshy woods; shrub 8-15' h; Catkins: white.

283. January; ~~&~~ moist banks of a ~~small river~~ herb ½-2' h; leaves in whorls of 4; fruit in 2° facing each other.

284. February; bottom land ~~on~~ margin of a river, shady places; leaves deep green.

285. Myrtus
March; damp marshy woods; tree 30–50' h bearing fr. in great abundance; which is eagerly sought after by ants.

286. Myrtus
March; damp shady woods; shrub 15–20' h.

287. Unbekn. Eucalyptus resinifera
Jan. & Febr.; low level land at the margin of woods fronting the sea-shore; tree 30–60' h, branching near the base. fl: white. leaves: thick & stiff. often inclined & depressed.

288.
Febr.; margin of woods; shrub 5–8' h; fl:- spike 6–8" l; corolla's breadth ½" l, narrow. fl: white.

289. Gen. nov. Rondeletiaceum?
Febr. & March; margin of swamps near the river; shrub 4–8' h.

290. Actinodaphne
Janu:, margin of woods near the sea-shore; tree 25–30' h; fl: flowers: white.

291. Myrtacea
Febr: 10ft, shady woods in a low swampy region; arbores somewhat twining or leaning over other trees with their slender branches somewhat (tree) paniculing & sending out aëreal root-fats; pedunculus 1½" l, very stout, fl: hairy at the lower part of the calyx a singular appendage like 2 ears; They are and somewhat twisted, fleshy, the back green; sep: in 2 rows, adnate; pet: 5, green, recurved like a crown, stam: all: 5, reddish color, at right angles to the axis of the flower; anthers somewhat recurved, exuding a brownish greasy liquid.

292. Cordia
March, 24ft; hilly region, margin of woods; sep: green; petals: minute, white.

293. Boroquerea
March, 21ft; low damp shady woods; shrub: 12–15' h; lower part of the corolla green, upper part pure white; anthers: brown.– (fr: v: No 1r)

294.
January; in swampy places; fl: white.

295. Blakea sp n?
March, damp shady woods near at the margin of with swampy places; shrub, 10–20' h;

296.
April, 2ft in diam near swampy marshy places in shady woods; leaves thick.

297. Begonea humilis Dryand.
March 30th April 1st; low wet places in shady woods; pl: 6"–14" growth erect; petals: 4–5, white, anthers: yellow.

298.
March; damp shady woods hilly region, bank of a rivulet; fl: white greenish wh.

299.
Febr:; margin of shady woods near swamps; shrub 8–12' h.

300
April, 3d; margin of damp shady woods fronting the seashore; shrub 2–3" h; calyx green; Corolla: white,

301.
Febr: 20ft; creeping over fallen trunks of trees; in low moist places in the woods. Ants have injured the flowers fruit.

302. Peperomia pellucida HBK
Febr:; low grassy places, on the low near the sea-shore; a low herb semi-transparent; fr: little globulous bodies in spikes 1–1¼" l.

303.
Mar Febr:; hilly region, bank of a rivulet. fr: Shrub 6–8' h; fr: generally in 4's, leaves stout,

304. Guarea amara L. var grandiflora
fr: in 4 January; margin of shady woods, fl fronting the sea shore; shrub 8–12' h; fl: scarlet 1–1¼" l, not widely opened (expanded); base of the stamens tomentose; fruit: in 4 inserted around a thick fleshy receptacle.

305. Doliocarpus
Febr:; shady woods; pl: somewhat twining. fl: yellow.

306.
January, 8ft; margin of little streams, shrub tree, 10–20' h; pet: fugative, fl: white.

307. Cochlospermum tetraphyllum DC
Janu & Febr:; margin of woods; tree 30–40' h; flowers yellow, 2½" in diam. when expanded.

308. Anacardium occidentale L.
January; margin of woods fronting the sea shore; small trees 5 high; petals: greenish-white (with red lines along the centre, linear, accuminate, retroflexed; Style projecting; green fruit giving out a greasy substance in being split. Receptacle or torus: when fruit grown 2½" long, 1¾" in diam: at the end bearing the fr: 1" at the opposite end, resembling in shape a pear; fruit very hard of fine yellow colour & tinged with red at the shining side, pendant, very mellow & juicy when ripe and sold as an eatable fruit, but to me it had a somewhat astringent taste.

309.
Janua:; deep shady woods; tree 30' h; fl: yellow; sepals: brownish tomentose with black spots

310. Pachira
Febr: & March; margin of woods fronting the sea-shore; tree 70–80' h; highly could see no leaves on them during my 3 months stay at Chagres. trunk armed with short but stout spines; petals 3" l, narrow, inside white outside brown & somewhat tomentose; stam: as long as the petals, April 1½ a young leaf. (distrib: to sect No 1)

311.
Febr:; low swampy margin of the river; tree 30–70' h; pet: 5 imbricated 10–12" l, narrow inside white; outside greenish yellow; could not get any of the leaves.

312. Pachira
January 6–15ft; low moist bank of the river; tree 20–50' h; lower part of the trunk conical, bark of lively green, petals 2½–3" long; inner surface of the pet: white, outside greenish brown.

313.
January; hilly region; shrub 5–8' h; fl: white.

314. Ardisia
February, 20ft; margin of woods fronting the sea-shore; 10–20' h; pet: 5, white much recurved as in Solanum; low

315.
March; foot of hills;

316. Moronobea globulifera
March 17ft; deep shady ground; tree 50–60' (bark) ¾ of each pet: imbricated by the next fellow to the right; Stam: 5 red, adnate to the out-side of the stamens; 3 to each stam:, in the bud yellow, but afterwards black; pistils: 5, red, alternate

317. Pentadesma discophlebia HBK
March, 24ft; margin of woods hilly region; small trees 15 sepals: reddish yellow; pet: yellow apex.

318. Gen. nov. Lauraceæ affine?
March, 18ft; deep shady a small tree 6" in diam: ; 20 green; corolla: none.

319.
March, 5ft; margin of woods; shrub sep: pedicles, pedunces & sepals: purple; petals: white tinged slightly with red; anthers erect, accuminate.

320.
April, 8ft; shrub margin of woods; shrub; fl: white.

321.
January; hilly region;

322.
February, lower part of bank of a creek, margin in moist fertile soil.

323.
Febr:; low marshy river bank, in the woods. tree 30–40' h.

17/3 50. Chagres. A high tree
fl: red. pet: 5 red, ¾ of the pet: is imbricated by the next fellow to the right; Stam: 5 red, adherent by their lower part as far as the anthers. anthers adnate to the inner side of the stamens 3 to each stamen, in the bud yellow, but afterwards black; pistil: 5, red, altern:

No 316.

like a crown, Stam: all: 5 reddish color, at right angles to the axis of the flower; anthers somewhat recurved, exuding a brownish, gray liquid

No 291.

324.
January; the lower part of a creek-bank, near the water.

325.
January; local with the preceding; 2–3' h.

326. Apeiba
Febr: 4ft; hilly region; margin of woods; shrub 15–20' h with spreading of crooked growth & with spreading branches; fruit: flattened.

327.
February 28ft; hilly region; pl: twining; fr: a kind of a pod containing 1 greenish black seed with dimpled surface.

328. Vitex Orellana var. pseudo-Negundo
January; margin of woods fronting the sea-shore, low sandy beach; low a low shrub, also trees 20–30' h; fr: covered with coriaceous timber spines.

329.
January; damp shady woods, 15 to 20' h;

330. Drepanocarpus?
March, 20ft; hilly region; at timber timber ing & resting upon other flowers: not yet expanded,

20 corky ledonea,

damp marshy trunks of live trees 5' above from the ground, low I was unable to dry difficult to dry.

332.
Jan:– March; damp marshy woods on exposed roots & on the bases of the lower part of trees; flowers red.

333.
or damp marshy woods on roots & the bark of the trunks

on the dead trunks of flower in damp shady woods; brownish green.

335.
March; margin of woods; twining & climbing by petioles; fl: reddish brown.

336.
fruit specimen sp: of 335?
March; local with 335.

337.
March; marshy places, in shady woods; pl: 2–3' h. fl: white.

338.
April, 6ft, marshy places in the woods near the river; 4–5' h, flower: white

285. Piper
March; damp marshy woods; tree 30-50' h bearing fr. in great abundance; which is eagerly sought after by ants.

286. Piper
March; damp shady woods; shrub 15-20' h.

287. Unbaúba cecropioloba Miquel
Jan & Febr.; low level land at the margin of woods fronting the sea-shore; tree 30-60' h, branching near the base; fl. white. leaves: thick & stiff. Stem often inclined & depressed.

288.
Febr.; margin of woods; shrub 5-8' h; fl.-spike 6-8" l; corolla's breadth ½" l, narrow; fl. white.

289. Gen. nov. Rondeletiaceum?
Febr. & March; margin of swamps near the river; shrub 4-8' h.

290. Cathoxylum
Jan.; margin of woods near the sea-shore; tree 25-30' h; fl. flowers: white.

291. Ruyschia
Febr. 10; shady woods in a low swampy region; arbor; somewhat twining or leaning over other trees with the slender branches somewhat pairiding, sending out aëreal roots; pedunculus 1½" l; very stout; fl. having at the lower part of the calyx a singular appendage like 2 ears; They are red and somewhat twisted, fleshy, the beak green; sep: in 2 rows, adnate; pet: 5, green, recurved like a crown; stam: 5, reddish color, at right angles to the axis of the flower; anthers somewhat recurved, exuding a brownish greasy liquid.

292. Cordia
March, 24; hilly region, margin of woods; sep: green; petals: minute, white.

293. Borojuerèa
March, 21; low damp shady woods; shrub: 12-15' h; lower part of the corolla green, upper part pure white; anthers: brown. — (fr: v: No 1½)

294.
January; in swampy places; fl: white.

295. Blakea sp?
March; damp shady woods near at the margin of with swampy places; shrub, 10-20' h;

296.
April, 2½ in Apr near marshy places in shady woods; leaves thick.

297. Begonia humilis Dryand.
March 30; April 1½; low wet places in shady woods; pl: 6"-14" growth erect; petals: 4-5, white, anthers: yellow.

298.
March; damp shady woods hilly region, bank of a rivulet; fl: white greenish wh.

299.
Febr.; margin of shady woods near swamps; shrub 8-12' h.

300
April, 3d; margin of damp shady woods fronting the seashore; shrub 2-3" h; calyx green; Corolla: white, cup-shaped; stam: as long as the petals; pist: as long as the stam.

301.
Febr. 20; creeping over fallen trunks of trees; in low moist places in the woods. Ants have injured the flowers or fruit.

302. Peperomia pellucida HBK
Febr.; low grassy places, on the low near the sea-shore; a low herb semi-transparent; fr: little globulous bodies in spikes 1-1¼" l.

303.
Febr.; hilly region, bank of a rivulet. Shrub 6-8' h; fr: generally in 4's, leaves stout,

304. Guarea amara L. var grandiflora
fr: in 4 January; margin of shady woods, fronting the sea shore; shrub 8-12' h; fl: scarlet 1-1¼" l, not widely opened (expanded); base of the stamens tomentose; fruit: in 4 inserted around a thick fleshy receptacle.

305. Doliocarpus
Febr.; shady woods; pl: somewhat twining. fl: yellow.

306.
January, 8; margin of little streams, shrub or tree, 10-20' h, pet: fugitive, fl: white.

307. Cochlospermum tetraphyllum DC
Jan & Febr.; margin of woods; tree 30-40' h; flowers yellow, 2½" in diam. when expanded.

308. Anacardium occidentale L.
January; margin of woods fronting the seashore; small trees 15-60' high; petals: 5 equal, green-ish-white (with red lines along the centre, linear, accuminate, retroflexed; style projecting; green fruit, giving out a greasy substance in being split. Receptacle or torus: when fruit grown 2½" long, 1¾" in diam: at the end bearing the fr: 1" at the opposite end, resembling in shape a small kind of pear; fruit very hard of fine yellow color, green with red at the sunny side, pendant, very mellow & juicy when ripe and sold as an eatable fruit, but to me it had a somewhat astringent taste.

309.
Januar.; deep shady woods; tree 30' h; fl: yellow; sepals: brownish tomentose with black spots

310. Pachira
Febr: & March; margin of woods fronting the sea-shore; tree 70-80' high, could see no leaves on them during my stay at Chagres. trunk armed with short but stout spines; petals 3" l, narrow, inside white outside brown & somewhat tomentose; stam: as long as the petals, April 1½ a young leaf. (distrib: to dist No 1)

311.
Febr.; low swampy margin of the river; tree 30-70' h; pet: 5, imbricated 10-12" l, narrow, inside white; outside greenish yellow; could not get any of the leaves.

312. Pachira
January, 6-15; low moist bank of the river; tree 20-50' h; lower part of the trunk conical, bark of lively green, petals 2½-3" long; inner surface of the pet: white, outside greenish brown.

313.
January; hilly region; shrub 5-8' h; fl: white.

314. Ardisia
February, 20; margin of the sea-shore. 10-20' h; pet: 5, white smell recurved as in Solanum;

315.
March; foot of hills;

316. Moronobea globulifera
March, 17; deep shady ground; tree 30-60' h (with) ¾ of each pet: imbricated one to the right; stam: 5, not coherent at their bases as far as the anthers. anthers adnate to the out-side of the stamens, 3 to each stam; in the bud yellow, but afterwards black; pistils: 5, red, alternate

317. Ternstroemia dulcedoides HBK
March, 24; small trees margin of hilly region; small trees 15-20' high; petals: 5 equal, reddish yellow; pet: yellow apex.

318. Gen. nov. Laurinèa affinis?
March, 18; deep shady woods; a small tree 6" in diam: 20-30' high; green; corolla: none.

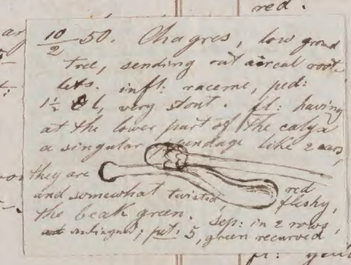
319.
March, 5; margin of woods; shrub sep: pedicles, peduncles & sepals; purple, petals: white tinged slightly with red; anthers erect, accuminate.

320.
April, 8; shrub margin of woods; shrub; fl: white.

321.
January; hilly region;

322.
February; lower part of bank of a creek, margin in moist fertile soil.

323.
Febr.; low marshy river bank, in the woods. tree, 30-40' h.


10-50. Chagres, low grows tree, sending out aëreal roots. inflr: racemi, ped: 1½" l, very stout. fl: having at the lower part of the calyx a singular appendage like 2 ears; they are red and somewhat twisted, fleshy, the beak green; sep: in 2 rows, adnate; pet: 5, green recurved

324.
January; the lower part of a creek-bank, near the water.

325.
Jan.; local with the preceding; 2-3' h.

326. Apeiba
Febr: 4; hilly region; margin of woods; shrub 15-20' h with spreading of crooked growth & with spreading branches; fruit: flattened.

327.
February 28; hilly region; pl: twining; fr: a kind of a pod containing 1 greenish black seed with dimpled surface.

328. Vèga Orellana var. pruetu depressa
January; margin of woods fronting the sea-shore, low sandy beach; low a low shrub, also trees 20-30' h; fr: covered with somewhat timber spines.

329.
January; damp shady woods; 15-20' h;

330. Dressanocarpus
[illegible] hilly region; of timber timber [illegible] & resting upon other [illegible]; fruit: not yet expanded,

[illegible] coccifera Ledonia.

[illegible] damp marshy [illegible] trunks of live trees [illegible] from the ground; fl: pale yellow. Leaves [illegible] able to dry leaves most difficult to dry.

332.
Jan.— March; damp marshy woods on exposed roots & on the bases of the lower part of trees; flowers red.

[illegible] damp marshy woods on roots & the bark of the trunks

on the dead trunks of flower in damp shady woods; fl: greenish green.

335.
March; margin of woods; twining & climbing by petioles; fl: reddish brown.

336. fruit specimen; sp. of 335?
March; local with 335.

337.
March; marshy places in shady woods; pl: 2-3' h. fl: white.

338.
April, 6; marshy places in the woods near the river; 4-5' h, flower: white

285. Fuscia
March; damp marshy woods; tree 30-50' h, bearing fr. in great abundance; which is eagerly sought after by ants.

286. Fuscia
March; damp shady woods; shrub 15-20' h.

287. Umbellifera cocoloba uvifera
Febr. Jan & Febr.; low level land at the margin of woods fronting the sea-shore; tree 30-60' h, branching near the base; fl. white. leaves: thick & stiff. often inclined & depressed.

288.
Febr.; margin of woods; shrub 5-8' h, fl.-spike 6-8" l; corolla throath ½" l, narrow fl: white.

Gen. nov. Rondeletiearum?

289. Febr. & March; margin of swamps near the river; shrub 4-8' h.

290. Cathartexylum
Janu:, margin of woods near the sea-shore; tree 25-30' h.; flower: white.

291. Rutaceæ
Febr. 10th, a shady woods on a low swampy region; arborescent tree (tree) somewhat twining or leaning over other trees with the slender branches somewhat pareding & sending out aërial root lets; pedunces 1½" l; very stout; fl. having at the lower part of the calyx a singular appendage like 2 ears; They are red and somewhat twisted, fleshy, the beak green; sep: in 2 rows, adnate; pet: 5, green, recurved like a crown, stam: 5, reddish color, at right angles to the axis of the flower; anthers somewhat recurved, exuding a brownish greasy liquid.

292. Cordia
March, 24th; hilly region, margin of woods; sep: green; petals: minute, white.

293. Bocqueria
March, 21st; low damp shady woods; shrub: 12-15' h; lower part of the corolla green, upper part pure white; anthers: brown. — (fr: v: No 1½)

294.
January; in swampy places; fl: white.

295. Blakea ?
March, on damp shady woods near at the margin of with swampy places; shrub, 10-20' h.

296.
April, 2½ in diam (near swampy marshy places in shady woods; leaves thick.

297. Begonia Plumieri Dryand.
March 30th, April 1st, low wet places in shady woods; pl: 6"-14" growth erect; petals: 4-5, white, anthers: yellow.

298.
March; damp shady woods hilly region, bank of a rivulet; fl: white greenish white.

299.
Febr.; margin of shady woods near swamps; shrub 8-12' h.

300
April, 3d; margin of damp shady woods fronting the seashore; shrub 2-3 in ø 11' h; calyx: green; Corolla: white,

301.
Febr. 20th; creeping over fallen trunks of trees; in more low moist places in the woods. Ants have injured the flowers fruit.

302. Peperomia pellucida HBK
Febr.; low grassy places, on the low near the sea-shore; a low herb semi-transparent; fl: little globulous bodies in spikes 1-1¼" l.

303.
Mar Febr.; hilly region, bank of a rivulet. fr. Shrub 6-8' h; fl: generally in 4's, leaves stout,

304. Guevina amazonica var grandiflora
fr. in 4 January; margin of shady woods, fl fronting the sea shore; shrub 8-12' h; fl. scarlet 1-1¼" l, not widely opened (expanded); base of the stamens tomentose; fruit: in 4 inserted around a third fleshy receptacle.

305. Doliocarpus
Febr.; shady woods; pl: somewhat twining. fl. yellow.

306.
January, 8th; margin of little streams, shrub tree, 60-80' h. pet: fugitive, fl. white.

Cochlospermum tetraphyllum DC.

307. Janu & Febr.; margin of woods; tree 30-40' h; flowers yellow, 2½" in diam. when expanded.

308. Anacardium occidentale L.
January; margin of woods fronting the seashore; small trees shrub of the 40' high; petals: 5 narrow, greenish-white (with red lines along the centre, linear, accuminate, retroflexed; style projecting; green fruit giving out a greasy substance in being split. Receptacle or torus: when fruit grown 2½" long, 1¾" in diam: at the end bearing the fr: ½" at the opposite end, resembling in shape a pear; fruit very hard of fine yellow colour tinged with red at the shiny side, pendant, very mellow & juicy when ripe and sold as an eatable fruit, but to me it had a somewhat astringent taste.

309.
Janua:; deep shady woods; tree 30' h; fl: yellow; sepals: brownish tomentose with black spots

310. Pachira
Febr. & March; margin of woods fronting the sea-shore; tree 70-80' high, could see no leaves on them during my stay at Chagres; trunk armed with short but stout spines; petals 3" l, narrow; inside white outside brown somewhat tomentose; stamens as long as the petals.
April 1½ a young leaf. (distrib: to dist. No 1)

311.
Febr.; low swampy margin of the river; tree 30-70' h; pet: 10-12" l, narrow inside white; outside greenish yellow; could not get any of the leaves.

312. Pachira
January, 6-15'; low moist bank of the river; tree 20-50' h; lower part of the trunk conical, bark lively green; petals 2½-3" long; inner surface of the pet: white, outside greenish brown.

313.
January; hilly region; shrub 5-8' h; fl: white.

314. Ardisia
February, 20th; margin of woods fronting the sea-shore; 10-20' h; sepals: minute red, pet: 5, white bright yellow conspicuous much recurved, anthers erect as in Solanum; fr.

315.
March; foot of hills; 15-20' h; fl: white.

316. Moronobea globulifera Achleadt.
March, 17th; deep shady woods or swampy ground; tree 30-60' h; petals: 5, red (mag. lish) ⅔ of each pet: imbricated by the next one to the right; stam: 5, red coherent at their bases as far as the anthers. anthers adnate to the out-side of the stamens, 3 to each stam:, in the bud yellow, but afterwards black; pistils: 5, red, alternate

317. Pentastemma discophora HBK
March, 24th; small trees margin of woods hilly region; small trees 15-20' h; sepals: reddish yellow; pet: white with yellow spots.

Gen. nov. Lamprodiscophora?

318. March, 18th; deep shady woods; a small tree 6" in diam:; 20-30' h; calyx green; corolla: none.

319.
March, 5th; margin of woods; shrub sep: pedicles, peduncles & sepals: purple, petals: white tinged slightly with red; anthers erect, accuminate.

320.
April, 8th; shrub margin of woods; shrub, fl. white.

321.
January; hilly region;

322.
February; lower part of bank of a creek, margin in moist fertile soil.

323. Febr.; low swampy marshy river bank, in the woods. tree, 30-40' h.

324.
January; the lower part of a creek-bank, near the water.

325.
Jann ary, local with the preceding; 2-3' h.

326. Apeiba
Febr. 4th; hilly region, margin of woods; shrub 15-20' h with spreading of crooked growth & with spreading branches; fruit: flattened.

327.
February 28th; hilly region; pl: twining; fr. a kind of a pod containing 1 greenish black seed with dimpled surface.

328. Vexa Orellana var. fœtida depressa
January.; margin of woods fronting the sea-shore, low sandy beach; a low shrub, also trees 20-30' h; fr: covered with somewhat timber spines.

329.
January; damp shady woods, 15 to 20' h.

330. Dreponocarpus?
March, 20th; hilly region; of timber timber shrub leaning & resting upon other shrubs. flowers: not yet expanded, fr: not seen.

Monocotyledoneæ.

331.
Febr. & March.; on damp marshy places, on dead trunks of live trees sometimes 15' above from the ground; fl: pale yellow I was unable to dry leaves most difficult to dry.

332.
Jan:- March; damp marshy woods on exposed roots & on the bases of the lower part of trees; flowered.

333.
March; on rocks damp marshy woods on exposed roots & the bark of the trunks of trees.

334.
March; on the dead trunk of a tree; flowers in damp shady woods; fl: yellowish green.

335.
March; margin of woods; twining & climbing by petioles; fl: reddish brown.

336. fruit species sp: of 335 ?
March; local: with 335.

337.
March; marshy places, in shady woods; pl: 2-3' h. fl: white.

338.
April, 6th; marshy places in the woods near the river; 4-5' h; flower: white

Cyperaceæ.

339. January; 9ᶜ; low sandy beach.

340. January; sandy beach.

341. Jan:; margin of ~~swamps~~ marshes.

342. Febr:; wet & low places on the low sandy beach. 6"–12" h.

343. Jan: 9ᶜ, wet places on the low sandy beach.

344. Jan 9ᶜ —— ——

345. Jan: 9ᶜ —— ——

346. Jan: 20ᶜ —— ——

347. Jan: 15ᶜ —— ——

348. Febr:; bank of a ~~small~~ rivulet; 6-8"h.

349. Jan: – March; low sandy beach, wet places, 1–2' h.

350. Jan: – March; margin of ~~swamps~~ marshes.

351. January; margin of swamps; 1–1½' h.

352. January; low sandy beach.

353. January, 10ᶜ; low shady places in the woods; 2½–3½' h.

354. ~~March~~ Febr.; ~~damp~~ low shady woods, ~~tufts~~ pl: 3–4' h.

355. Febr: – ~~March~~ April; margin of swamps. pl: 1–2' h.

356. March; marshy places in ~~low~~ shady woods; 3–4' h

357. ~~Febr:~~ & March; low shady woods; 1–1½' h.

358. January, 11ᶜ; wet shady places in the woods; 2–3' h.

359. March; wet places, in low shady woods, 3–5' h;

360. March; marshy places in the woods; 4–6' h;

361. Febr: – March; hilly region, margin of the woods, in dry places.

362. January; grassy places low sandy beach; creeping.

Gramineæ.

363. January 10ᶜ, low meadow near the sea-shore.

364. January, 10ᶜ; low ~~moist~~ meadow near the seashore.

365. Panicum Crus-Galli: January 20ᶜ; wet places on the ~~beach~~ sea shore. 3–5' h;

366. Paspalum January; low moist meadow.

367. January; moist sandy beach; 6–12' h;

368. January; low moist meadow.

369. Jan: 9ᶜ ——

370. Jan: ~~Febr~~ March; low moist meadow.

371. March; hilly region.

372 a Febr:; ~~mud~~ ~~marsh~~ margin of the marshy bank of the river. 6–10' h.

372 b ——

373. Febr:, marshy places in the woods close to the exposed roots of trees.

374. Jan: 9ᶜ; low shady places in the woods.

375. January, on decayed trunks of trees, in shady woods.

376. March; margin of the woods, low grassy places

377. March; ——

378. Febr:; wet sandy places on the beach, 1–2' h.;

379. March; ~~low bank~~ margin of the river. 3–4' h.;

380. ~~Feb~~ January; low moist places in shady woods, 4–6' h.

381. April 6ᶜ, low marshy region near the river. 10–18' h.

Lycopodiaceæ

382. January – March; in damp shady places, on creek-banks; growth adnate to the ground.

383. February; lower part of the creek-banks; growth: erect, 6–14" h.;

384. January; damp shady woods; pl: twining. leaves: opposite, but leaflets: alternate leafl: undivided, except in some rare cases ƒ3 divid.

385. January, 10ᶜ; damp shady woods. pl: twining; stem & branches somewhat pubescent.

Filices.

386. (№ 2) Febr:; creek-bank; lower surface of the fronds white powdered.

387. March; damp shady creek-bottom, on moist ~~rocks~~ back of branches, ~~& stems~~ of trees.

388. (№ 1) ~~roots not creeping~~ March; lower part of a moist creek-bank; fertile sort. roots not creeping cc: vid: (№ 1.)

389. (№ 3) March; loc: with the preceding one.

390. (№ 4) March; creek-valley.

391. (№ 5) March; ——; to fronds 1–2" long

392. (№ 5) February; ~~abundant~~ on the surface of olive Palm-trees, sometimes 15–20 feet above the ground, also near the base of the trees, ~~& rocks~~ damp shady woods. fronds 3–4' l. entire, accumulate, exceedingly slow in drying.

393. (vid 6) March; local: with the preceding № frond 2–3' h; Specimen dry exceedingly slow

394. (№ 8) March; damp shady creek-~~bank~~ bank.

395. (№ 7) March & April; damp shady woods marshy region; a parasite on the branches of trees; ~~fern~~ specimens dries exceedingly slow.

396. (№ 9.) January – March; in marshes; fronds 5–8' h;

397. (№ 10) March; ~~on~~ margin of a creek, damp shady bank.

398. (№ 11) March; ~~damp~~ place in the shady woods; ~~2–3 h.~~ fronds 2–3' h;

399. (№ 12) February hilly region; ~~rock~~ shady creek-bank; fronds 2–3½' long.

400 (№ 13) February; loc: with ~~the~~ № 399.

401 (№ 14) February; ——

402. (15) March; low creek-bank, shady woods, frond 2–2½' h.

403. (№ 16) January; March; locality with № 402. low wet places in the woods; fronds 3–5' h.

404. March; steep shady creek-bank; fronds 4' long;

405. March; local: with № 404; fronds 4–5' long

406. (19) January; damp shady creek-bank. fronds 2' long

407. (20) January; ~~Febr~~ 2–2½' l.; local: with № 406; fronds

408. February; hilly region; deep ravines; fronds 3' h;

409. (№ 21) January – March; high bank of a rivulet; frond 1–2' h;

410. (21 a) February; damp shady woods; fronds 1–1½' long

411. (№ 22) March; steep shady bank of a creek. fronds 4–5' long.

412. (23) March; damp shady woods; ~~& fronds~~ 1½–2' long

413. January – March; ~~high bank of a rivulet~~. damp shady places in the woods; 1–2' h.

414. March; high bank of a rivulet. 1½–2' h;

415. ~~March~~; ——; 8–16" h;

416. (25) February; damp shady woods; frond 2½' long.

417. February; low bank of a rivulet in shady woods; 4–5' h. spors easily fructification easily coming off.

418 (26) March, damp shady places in the woods; on the trunks of ~~trees~~ Palm-trees; and on dead stumps. fronds 4–7' long; ~~tufted~~ plants ~~very~~ exceedingly difficult to dry.

419. March; damp shady woods; on ~~the~~ stumps & exposed roots of trees.

420. (28) January – March; wet shady places in the woods; 3–4' h; exceedingly difficult to dry.

421. (№ 29.) January; low bank of a small river pl: 4–7' high.

339. Jan

340. Jann

341. Jan:

342. Febr: 6"

343. Jan:

344. Jan

345. Jan:

346. Jan

347. Jan:

348. Febr

349. Jan: 1-2'

350. Jan:

351. Janua

352. Janua

353. Janu wood

354. Marc pl: 3

355. Febr: pl:

356. Marc wood

357. Febr 3

358. Janua woods

359. Marc 3-5'

360. Marc 4-6

361. Febr: woods,

362. January

363. Janu sea-sh

422. January; shady banks of a creek in the woods; ~~fr~~ fronds 2-2½' long.

423. March; damp, shady woods; marshy region, on branches of trees. some Monocotyledons.

424. Cocoa-Nut

February; ~~low~~ flat marshy region along the sea-shore; trees, ~~30~~ 90' h.

425. January; wet ~~low~~ banks of a rivulet; ~~fl~~ spat. 8-~~8~~' h, ~~sparthe~~ ~~scapes~~ of the fl: greenish white.

426. March; marshy places in damp shady woods; pl: 2-3' h; spathe scape of the fl: white.

427. February; margin of a rivulet in shady woods; pl: 8-10' h; fr: purplish red.

428. Febr: 10ᵗʰ; ~~on~~ stamps also on the sides of low but ~~thick~~ stout palm-trees; fr: ~~wit~~-spike; ~~near~~ 2' long. petiole about 3' long, some stiff, leaf: palmate by 9 divided, leaflets 2' long.

429. February; on stumps & trees in shady woods.

430. February; on stumps & ~~bodily~~ decayed ~~dedd trunks of trees~~ logs, damp shady places

431. ~~Febr~~ & March; on the sides of short but stout Palm trees, spathe ~~scapes~~ of the fl: greenish yellow.

432. ~~January~~ March; damp shady woods, ~~marshy~~ region; pl: growing on stumps & trees; stalk ~~no~~ spiny.

433. February 12ᵗʰ; damp shady woods marshy region; pl: ~~10~~ a slender conical growth 10-20' high, densely armed with short but stout spines; stem without branches and without leaves except a tuft or bunch of leaves at the apex. fr ~~easily~~ splitting

434 January; damp, shady woods.

435. January; ~~fr~~ in marshes, at the margin of woods.

436. January & February; in the water of marshy pldces.

437. Febr:; on stumps ~~&~~ palm trees; leaves very thick & difficult to dry; flower: pure white.

438. March; on ~~a palm~~ tree; flowers: greenish yellow.

439. March; local: the same with 438. fl: purple.

440. March, 4ᵗʰ; in marshy places margin of woods; ~~climb~~ pl: climbing. fl: greenish yellow with purple ~~st~~ veinlets.

441. March; steep & moist banks of a ~~ra~~ ~~da~~ narrow rivulet; pl: 4-6' h:

442. January & Febr:; marshy places in shady woods. pl 3-5' h.

443. January; marshy places & low banks of rivulets; pl: 5-8' h; ~~greater part of the~~ scapes purple; fruit when ~~ripe~~ ripe upper part deep blue, lower part green;

444. March; marshy place in shady woods; pl: 8-10' h;

445. Febr:; ~~low~~ wet places in shady woods pl: 3-5' h.

446. January; local: with 445; pl: 3-4' h; ~~seal~~ fruit-scales purplish

447. March; ~~in~~ damp shady woods, marshy region (thick); pl: ~~10~~ 8-~~14~~ h; flowers: deep purple with white veinlets.

448. Febr: 11ᵗʰ; high banks of rivulets, shady woods; strong vines hang down from the ~~stem~~ branches of high trees and issue at their nodes, ~~branches~~ ~~of~~ ~~leaves~~ ~~fr~~ ~~vines~~ ~~reach~~ frequently the ground.

449. March; on the stems of Palm trees, ~~pl~~ stalks 1-1½' l.

450. March; local: the same with 449; stalk ½-1½-2½' l.

451. January; wet sandy beach; plant: creeping.

452. Febr:; damp shady woods, ~~moist~~ places; 1-1¼' h;

453. March; hilly region.

454. February 4ᵗʰ; wet shady places in the woods.

455. March, 8ᵗʰ; hilly region; plant climbing. ~~vide this~~ next col.

~~456~~ 290½ Leaves belonging to fruits to bulky to be laid in Sets, therefore not distributed.

456. March, 8ᵗʰ; margin of ~~the~~ woods, fronting the sea-shore, A small tree, 15' high; ~~the~~ stem, especially the lower part of it closely armed with spines; fruit erect, on pedicles (1½-2" long), fr: compressed 1¼" in perpendic: 2½" in horizontal ~~diam~~ direction; Sep: 4, persistent, fleshy, adhering to the fruit; branches & twigs contain a great quantity of sap somewhat ~~sticky~~ viscid. The plant is called by the Natives "haviya" and the seeds are said to be an excellent purgative.

457. March, 13ᵗʰ; shady woods, low level ground near a rivulet; plant: pendening; fruit: somewhat compressed armed with ~~soft~~ feathered timber spines; ~~fr stem~~ pl: exudes a milky sap.

458. March, 20ᵗʰ; hilly region, high bank of a rivulet; tree, 66' high, fruit pendant, a pood 10-12" long, twisted, densely beset with brown bristly hair.

459. Febr: 14ᵗʰ; damp shady woods, low banks ~~near~~ of a rivulet; ~~plant fruit~~ pendening turning?; fr: fruit pending on long strong like pedicelles (15-20' l.) from the branches of trees; fr: armed with deciduous sharp bristles which adhere to the hands: Leaves

460. composed of 3 separate leaflets.

February; marshy region; Palm-tree; ~~fr~~

~~461.~~ ~~456~~ 290½ February; margin of woods fronting the sea-shore. stem 15-20' high.

339. Jan

340. Jann

341. Jan:

342. Febr: 6–

343. Jan:

344. Jan

345. Jan:

346. Jan

347. Jan:

348. Febr

349. Jan: 1–2

350. Jan:

357. Jann:

352. Jann:

353. Jann: wood

354. Marc: pl:

355. Febr: pl:

356. Marc: wood

357. Febr:

358. Janna: woods

359. Marc: 3–5

360. Marc: 4–6

361. Febr: wood,

362. Januar 0

363. Janu: sea-sh